

road, to a first range in a pre-reading process and setting an area of a second map, which corresponds to a second part of the route associated with a second type of road, to a second range in the pre-reading process such that map data size of the second range of the area is less than the first range of the area;

A/ Cont.
data storing means for storing both first map data, which corresponds to the first map area set by the pre-reading process means and is provided from the map data providing means, and second map data, which corresponds to the second map area set by the pre-reading process means and is provided from the map data providing means, in the pre-reading process; and

guiding means for guiding the vehicle to take the route to the destination according to both the first map and the second map which are indicated by both the first map data and the second map data stored in the data storing means.

2. (Once Amended) The navigation device according to claim 1, wherein the pre-reading process means further comprises:

road attribute checking means for:

receiving the map data of a map area, which is partitioned into a plurality of map units and includes both the first type of road, to which a road attribute indicating the first type of road is attached, and the second type of road to which a road attribute indicating the second type of road is attached, from the map data providing means,

partitioning the route placed on both the first type of road and the second type of road into a plurality of route links, respectively included in one of the map

units, so as to attach the road attribute indicating the first type of road or the road attribute indicating the second type of road to each route link,

checking whether the road attribute attached to each route link indicates the first type of road or the second type of road,

specifying a first remarked map unit including each first remarked route link and one or a plurality of map units placed near to the first remarked map unit in cases where the road attribute attached to the first remarked route link indicates the first type of road,

specifying a second remarked map unit including each second remarked route link in cases where the road attribute attached to the second remarked route link indicates the second type of road,

controlling the data storing means to store data of the first remarked map units and data of the map units placed near to the first remarked map units as the first map data, and

controlling the data storing means to store data of the second remarked map units and data of the map units placed near to the second remarked map units as the second map data.

3. (Once Amended) The navigation device according to claim 2, wherein the first type of road denotes a general road other than a throughway, and the second type of road denotes a throughway.

4. (Once Amended) The navigation device according to claim 3, wherein one or a

plurality of map units, placed near one second remarked map unit, are specified by the road attribute checking means when a junction exists in the second remarked map unit, and the data storing means is controlled by the road attribute checking means to additionally store data of the map units placed near the second remarked map unit as the second map data.

5. (Once Amended) The navigation device according to claim 2, wherein a second pre-reading process is performed by the road attribute checking means to specify one or a plurality of additional map units placed near the map units, which are placed near the first remarked map unit or the second remarked map unit, and the data storing means, is controlled by the road attribute checking means to additionally store data of the additional map units.

6. (Once Amended) The navigation device according to claim 1, wherein the map data providing means storing means.

Please add the following new claims:

--7. (New) A navigation device comprising:

a disk unit for reading data from a recording medium, the data including map data;

a data buffer for storing the data read from the recording medium;

a vehicle position detecting unit for determining a current position of a vehicle by receiving inputs including global positioning information;

a route determining unit for determining a driving route from the current position of

the vehicle to a destination, the destination being inputted by a user; and

an information processing unit for outputting driving information based on the determined driving route,

wherein the driving route is divided into ranges, each range receiving an attribute depending on a classification of a road type within the range, and

wherein the amount of map data stored in the data buffer is dependent on the attribute associated with each range of the driving route.

8. (New) The navigation device according to claim 7, wherein upon completion of storing the map data, which is dependent on the attribute, in the data buffer, additional data other than map data is stored in a free area of the data buffer.

9. (New) The navigation device according to claim 7, wherein, depending on the attribute of the range, map data for adjacent ranges is stored in the data buffer.

10. (New) A method of determining a route for a vehicle in a navigation device, said method comprising the steps of:

determining a current vehicle position;

receiving, as an input, a destination;

determining a driving route from the current vehicle position to the destination;

storing map data, which is associated with the driving route, in a data buffer; and

outputting driving information based on the determined driving route,

wherein the driving route is divided into ranges, each range receiving an attribute depending on a classification of a road type within the range, and

wherein the amount of map data stored in the data buffer is dependent on the attribute associated with each range of the driving route.--

